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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,035	11/23/2001	Michael D. Dahlin	1039-0030	4451

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LARSON NEWMAN ABEL POLANSKY & WHITE, LLP  
5914 WEST COURTYARD DRIVE  
SUITE 200  
AUSTIN, TX 78730

EXAMINER
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GILLIGAN, CHRISTOPHER L.

ART UNIT	PAPER NUMBER
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3626

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/09/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

09/992,035

Applicant(s)

DAHLIN ET AL.

Examiner

Luke Gilligan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 4-9, 18, 21-25, 27 and 41-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4-9, 18, 21-25, 27, and 41-56 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/21/06 has been entered.

***Response to Amendment***

2. In the amendment filed 12/21/06, the following has occurred: claims 1, 18, and 27 have been amended, claims 41-56 have been added and claims 28-40 have been canceled. Now, claims 1, 4-9, 18, 21-25, 27, and 41-56 are presented for examination.

***Claim Rejections - 35 USC § 112***

3. Claims 45, 50, and 56 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 45 recites the phrase "the disease management engine is operable to modify...the healthcare workflow when an interface is displayed that is associated with a task identified in the task field of the element..." It is unclear how the conditional limitation of "when an interface is displayed that is associated with a task..." modifies the function of being "operable to modify...the healthcare workflow..." It is unclear what the "task identified in the task field of the element" needs to be associated with to define this conditional limitation. Is it associated with an interface? Is it associated with the displaying of an interface? In addition, there is insufficient antecedent basis for the phrase "the value of a content field" since there is no

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previous recitation of "a value of a content field." For examination purposes, the Examiner will treat this limitation as "the disease management engine is operable to modify, based on a content field, the healthcare workflow."

5. Claims 50 and 56 recite the phrases "modifying the interface associated with a task identified in the task filed based on the value of the content field." Since there is no previous recitation of "an interface associated with a task" nor "a value of the content field," there is insufficient antecedent basis for these limitations in these claims. For examination purposes, the Examiner will treat these limitations as "modifying the interface based on the content field."

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 4-5, 8-9, 18, 21-22, 25, 27, 41-51, and 54-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barry et al., U.S. Patent No. 6,188,988 in view of Martin et al., U.S. Patent No. 6,484,144.

8. As per claim 1, Barry teaches a system to implement at least one medical diagnostic or treatment algorithm in a healthcare workflow, the system comprising: storage including a first medical diagnostic or treatment algorithm, a second diagnostic or treatment algorithm, and at least one patient medical record (see column 8, lines 12-26, i.e. plurality of treatment regimens); a user interface operable to display an interface associated with the healthcare workflow to a healthcare provider, wherein the healthcare workflow includes a set of interfaces for the healthcare provider to enter patient medical data into the at least one patient medical record

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during a patient encounter (see column 12, line 61 – column 13, line 9); and a disease management engine operable to select the at least one medical diagnostic or treatment algorithm from the first medical diagnostic or treatment algorithm or the second medical diagnostic or treatment algorithm based on the at least one patient medical record and operable to modify the healthcare workflow in accordance with the at least one medical diagnostic or treatment algorithm based on the patient medical data (see column 13, lines 25-30).

9. Although the treatment regimens of Barry are associated with a plurality of factors including cost (see column 13, lines 30-32), Barry does not explicitly teach that they are associated with a first third-party payer or a second third-party payer. Martin teaches a method of selecting a treatment plan for a patient that includes associating third-party payers with treatment plans for the purpose of selecting an appropriate treatment plan (see column 15, lines 55-60). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate such association for analysis into the system of Barry. One of ordinary skill in the art would have been motivated to incorporate such a feature for the purpose of providing higher quality, more effective, and lower cost healthcare (see column 4, lines 50-53 of Martin).

10. As per claim 4, Barry teaches the system of claim 1 as described above. Barry further teaches the modification of the healthcare workflow is represented by the display of a banner (see column 16, lines 13-20, the Examiner is interpreting the pop-up “Change Therapy Recommendation” message box to be a form of “banner” as recited).

11. As per claim 5, Barry in view of Martin teaches the system of claim 1 as described above. Barry further teaches the modification of the healthcare workflow is represented by the display of a highlighted choice (see Figure 6B, it is noted that the adjusted dosage is indicated by a ‘+’ sign).

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12. As per claim 8, Barry in view of Martin teaches the system of claim 1 as described above. Barry further teaches the modification of the healthcare workflow is represented by the display of a recommended step therapy (see column 13, lines 25-30).

13. As per claim 9, Barry in view of Martin teaches the system of claim 1 as described above. Barry further teaches the user interface is a portable device (see column 9, lines 55-59, the Examiner interprets a computing device having minimal hardware to be portable).

14. As per claim 41, Barry in view of Martin teaches the system of claim 1 as described above. As described above, Barry does not explicitly teach a third party payer. Martin further teaches the first third-party payer is a prescription benefits management company, an HMO, or an insurance company (see column 15, lines 55-60). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate such a feature into the system of Barry for the reasons given above with respect to claim 1.

15. As per claim 42, Barry in view of Martin teaches the system of claim 1 as described above. As described above, although Martin teaches that third-party payers are insurance companies, neither Barry nor Martin explicitly teach that the second third-party payer is a government agency. The Examiner takes Official Notice that it was old and well known in the art at the time of the invention that there were government agencies that served as a third-party payer. For example, Medicare and Medicaid are old and well known examples of such government third-party payers. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a third-party payer in the form of a government agency within the combined teachings of Barry and Martin. One of ordinary skill in the art would have been motivated to incorporate such an element for the purpose of providing more cost effective health care (see column 4, lines 50-53 of Martin).

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16. As per claim 43, Barry in view of Martin teaches the system of claim 1 as described above. Barry further teaches the at least one medical diagnostic or treatment algorithm includes an element (see column 5, lines 10-25).

17. As per claim 44, Barry in view of Martin teaches the system of claim 43 as described above. Barry further teaches the element includes a task field, a condition field, and a content field (see column 5, line 26 – column 6, line 40 including the tables, note that numerous fields are included in the treatment regiment data).

18. As per claim 45, Barry in view of Martin teaches the system of claim 44 as described above. Barry further teaches the disease management engine is operable to modify, based on a content field, the healthcare workflow (see column 13, lines 25-30).

19. Claims 18 and 27 recite substantially similar limitations to those already addressed in claim 1 and, as such, are rejected for similar reasons as given above.

20. As per claim 46, Barry in view of Martin teaches the system of claim 18 as described above. Barry further teaches modifying the interface includes presenting an approval interface associated with approval of a procedure based on a care plan (see column 13, lines 25-30).

21. Claims 47-50 recite substantially similar additional limitations to those already addressed in claims 42-45 and, as such, are rejected for similar reasons as given above.

22. Claims 51 and 54-56 recite substantially similar limitations to those already addressed in claims 1, 18, and 27 (see page 12 of Applicant's remarks) and, as such, are rejected for similar reasons as given above.

23. Claims 21-22 and 25 recite substantially similar additional limitations to those already addressed in claims 4-5 and 8 and, as such, are rejected for similar reasons as given above.

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24. Claims 6, 23, and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barry et al., U.S. Patent No. 6,188,988 in view of Iliff, U.S. Patent No. 6,206,829.

25. As per claim 6, Barry in view of Martin teaches the system of claim 1 as described above. Barry does not explicitly teach the modification of the healthcare workflow is represented by the display of a question. Iliff teaches a medical treatment advice system that includes displaying to a user a modification of a healthcare workflow represented by the display of a question (see column 79, lines 59-63 and Figure 33). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Barry. One of ordinary skill in the art would have been motivated to incorporate such a feature for the purpose of aiding in selecting treatment regimens in which the information regarding the treatment options can be readily understood (see column 2, lines 33-45 of Barry) by presenting a user with additional questions as taught by Iliff.

26. Claims 23, 52, and 23 recite substantially similar additional limitations to those already addressed in claim 6 and, as such, is rejected for similar reasons as given above.

27. Claims 7 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barry et al., U.S. Patent No. 6,188,988 in view of Schmidt et al., U.S. Patent No. 6,839,678.

28. As per claim 7, Barry in view of Martin teaches the system of claim 1 as described above. Although Barry does teach that the system may be used for clinical drug trial activities, the reference does not explicitly teach the modification of the healthcare workflow is represented by the display of a notification of a drug trial. Schmidt teaches automatically determining and notifying a patient of eligibility for medical studies by a central server (see column 2, lines 9-19). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Barry. One of ordinary skill in the art



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would have been motivated to incorporate such a feature for the purpose supporting the clinical drug trial activities in Barry (see column 8, lines 1-5).

29. Claim 24 recites substantially similar additional limitations to those already addressed in claim 7 and, as such, is rejected for similar reasons as given above.

### ***Response to Arguments***

30. In the remarks filed 12/21,06, Applicants argue in substance that Barry fails to teach storing two disease management algorithms associated with a third-party payer, selecting one of the algorithms, and modifying a healthcare provider interface based on the selection. In response to Applicants' arguments, the Examiner respectfully submits that a new grounds of rejection in view of the combination of Barry and Martin has now been relied upon. Therefore, these arguments are now moot in view of the new grounds of rejection detailed above.

### ***Conclusion***


31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luke Gilligan whose telephone number is (571) 272-6770. The examiner can normally be reached on Monday-Friday 8am-5:30pm.

32. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on (571) 272-6776. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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33. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

3/5/07

  
C. LUKE GILLIGAN  
PRIMARY EXAMINER  
TECHNOLOGY CENTER 3600